

A NEW ENTOCYTHERID OSTRACOD OF THE GENUS *DACTYLOCYTHERE*

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Abstract.—A new species of entocytherid ostracod, *Dactylocythere scotos*, is described from Pennsylvania and Maryland. Comparisons are made with its most closely related cogeners, *D. crawfordi* and *D. phoxa*.

While surveying the entocytherid ostracods of Maryland, an undescribed species belonging to the genus *Dactylocythere* was found at a single locality in the mountainous western portion of the state. Subsequently, Dr. Horton H. Hobbs, Jr., obtained additional specimens of this ostracod from crayfish collected by A. E. Ortmann in Beaver County, Pennsylvania, in 1905. We thank Dr. Hobbs for allowing us to include the Pennsylvania material in this description, for critically reading this manuscript, and assisting us in other ways too numerous to mention.

Dactylocythere scotos, new species

Fig. 1

Description.—Male: Eye pigmented, situated about one-fifth shell length from anterior end. Shell (Fig. 1d) ovate but ventral margin slightly concave, greatest height distinctly posterior to midlength, posteroventral prominence lacking. Marginal setae sporadic around entire shell, most abundant along posterodorsal margin. Sternal spine not discernible.

Copulatory complex (Fig. 1a) with peniferum tapering to acute apex directed anteroventrally; peniferal groove generally narrow but widening slightly toward tip. Penis situated approximately at base of ventral one-third of peniferum, distal to base of clasping apparatus. Finger guard relatively thin, almost straight, and with rounded distal extremity entire. Clasping apparatus (Figs. 1a, b) L-shaped with vertical ramus thickened and with massive, angular shoulder on postaxial border; preaxial border of horizontal ramus with four evenly spaced teeth, fourth tooth extending as ridge obliquely across ramus toward postaxial border; apex with two denticles. Accessory groove simple, extending dorsally to level of dorsal margin of spermatic loop.

Female: Eye pigmented, situated about one-fourth shell length from anterior end. Shell (Fig. 1e) ovate, with greatest height distinctly posterior to midlength. Submarginal setae disposed as in male.

Genital apparatus (Fig. 1c) with prominent, strongly curved J-shaped rod and flared amiculum supported by U-shaped thickenings.

Size.—The lengths (in μm) of ten males range from 457 to 492, average 471; the heights range from 265 to 293, average 279; corresponding measurements of ten females are 473 to 522, average 487, and 268 to 299, average 292.

Type-locality.—Baden, Beaver County, Pennsylvania; from *Cambarus* (*Lacunicambarus*) *diogenes* Girard, 1852, coll. A. E. Ortmann, 26 Jul 1905.

Disposition of types.—The holotypic male and allotypic female are deposited

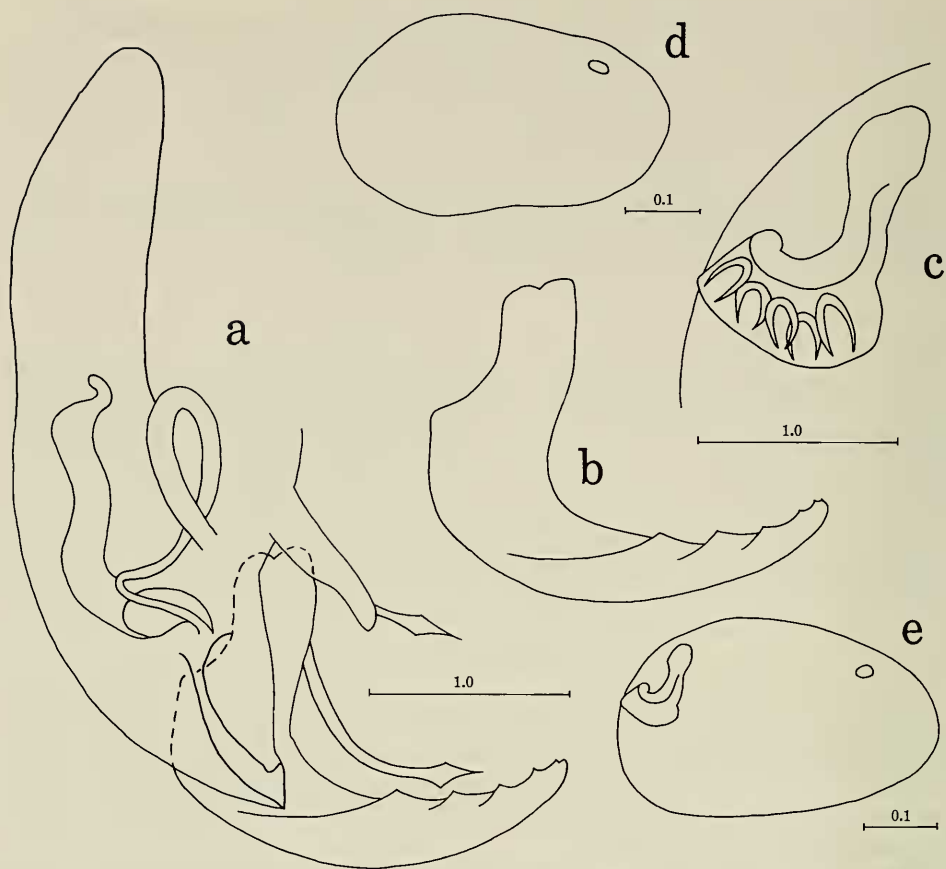


Fig. 1. *Dactylocythere scotos*: a, Copulatory complex of male; b, Clasper of male; c, Genitalia of female; d, Shell of male; e, Shell of female. (Scales in mm.)

in the National Museum of Natural History, Smithsonian Institution, USNM 210690. Paratypes are in the Smithsonian Institution, and the collection of the authors.

Range.—In addition to the type-locality, *Dactylocythere scotos* has also been found on *Cambarus diogenes* taken from burrows around Deep Creek Lake at McHenry, Garrett County, Maryland, by A. Norden and B. Norden on 16 June 1976.

Host.—The host at both known localities was *Cambarus diogenes*. Also present at the Maryland locality were *Cambarus* (*Cambarus*) *bartonii bartonii* (Fabricius, 1798), *Procambarus* (*Ortmannicus*) *acutus acutus* (Girard, 1852), and *Orconectes obscurus* (Hagen, 1870). Although large series of each of these three species were examined, no *D. scotos* were recovered.

Entocytherid associates.—One *Donnaldsoncythere donnaldsonensis* was recovered from collections containing *D. scotos*.

Relationships.—*Dactylocythere scotos* appears to have its closest affinities with *D. crawfordi* Hart, 1965, and *D. phoxa* (Hobbs, 1967). The most striking similarity is in the clasper of the male in which the horizontal ramus is much

longer than the short, heavy vertical ramus which bears a conspicuous shoulder on the postaxial margin. Similar also is the simple finger guard and the length of the accessory groove, which reaches the dorsal extremity of the spermatic loop. It and *D. phoxa* differ from *D. crawfordi* in possessing a heavier vertical ramus of the clasping apparatus and a subtriangular ventral part of the peniferum. It differs from *D. phoxa* in that the proximal tooth on the preaxial margin of the horizontal ramus is not digitiform, rather little different in size and shape from the second tooth, and the peniferal groove opens anteriorly rather than apically.

Etymology.—From the Greek, *scotos*, meaning darkness, in reference to the apparent restriction of this species to the burrowing crayfish, *C. diogenes*.

Literature Cited

- Hart, C. W., Jr. 1965. New entocytherid ostracods and distribution records for five midwestern states.—Transactions of the American Microscopical Society 84(2):255–259.
- Hobbs, Horton H., Jr. 1967. A new genus and three new species of ostracods with a key to the Genus *Dactylocythere* (Ostracoda: Entocytheridae).—Proceedings of the United States National Museum 122(3587):1–10.

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